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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte OUTI AHO

Appeal 2007-3602
Application 09/774,308¹
Technology Center 2600

Decided: February 29, 2008

Before JAMESON LEE, RICHARD TORCZON and SALLY C. MEDLEY,
Administrative Patent Judges.

MEDLEY, *Administrative Patent Judge.*

DECISION ON APPEAL

¹ Application filed on 31 Jan. 2001. The real party in interest is Nokia Corp.

A. Statement of the Case

This is an appeal under 35 U.S.C. § 134 from the Examiner's Final Rejection of claims 1-12. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Bhagwat

US 6,721,805 B1

Apr. 13, 2004

Claims 1-12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the admitted prior art in view of Bhagwat.

BACKGROUND

The invention is related to a wireless communication network method and corresponding device **21** for transferring capability information from the device **21** to a multimedia messaging service center (MMSC) **22**. The method includes storing the capability information of the device and placing the capability information in the payload part of a message **24** before the message **24** is transferred to a protocol stack. The message includes a header part and a payload part. The method also includes processing the message **24** containing the capability information according to a specific protocol stack; and transmitting the message **24** from the device **21** to the MMSC **22**. The device **21** can send the message **24** to the MMSC **22** in response to a request **23** or can do so independently without a request. (Spec. 3-8, Abs. and **fig. 2**).

B. Issue

The issue before us is whether Applicant has shown that the Examiner erred in determining that claims 1-12 are unpatentable under 35 U.S.C. § 103(a) over the admitted prior art in view of Bhagwat?

For the reasons that follow, Applicant has sufficiently shown that the Examiner erred in determining that claims 1-12 are unpatentable under 35 U.S.C. § 103(a) over the admitted prior art in view of Bhagwat.

C. Finding of Facts (“FF”)

The record supports the following finding of facts as well as any other findings of fact set forth in this opinion by at least a preponderance of the evidence.

1. Applicant’s claims 1-12 are the subject of this appeal.
2. Claims 1, 7 and 12 are independent claims.
3. Claims 2-6 and 8-11 are dependent on claims 1 and 7 respectively.
4. Claims 1-12 all stand or fall together (App. Br. 6).
5. Claim 1 is representative and is as follows:²

A mobile terminal device for transferring capability information, comprising

means for storing the capability information of the device in the memory of the mobile terminal,

means for preparing a message for transmission comprising processing according to a specific protocol stack,

means for transmitting the message comprising a header part and a payload part,

wherein the mobile terminal device further comprises

means for packing the capability information into the payload part of the message before the message is transferred to the protocol stack and

wherein said message is transmitted without separate request.

² Indenting added to comply with 37 C.F.R. § 1.75(i).

6. The Examiner found that the admitted prior art describes a device including means for storing capability information of the device, means for preparing a message for transmission comprising processing according to a specific protocol stack and means for transmitting the message comprising a header part and a payload part (Final Rejection 2 and Ans. 3-4).
7. The Examiner found that the admitted prior art does not describe means for packing the capability information into the payload part of the message before the message is transferred to the protocol stack wherein the message is transmitted without separate request (Final Rejection 2 and Ans. 4).
8. The Examiner found that Bhagwat describes what is deficient in the prior art since it describes that additional information regarding the wireless attachment (WAT) can be provided to the wireless access point (WAPt) in the payload, where support of power conserving sleep modes, authentication and encryption type are representative of the capability information, and does not require separate requests before the WAT notifies the WAPt whether it supports power conserving sleep modes, authentication and encryption (Final Rejection 2, Ans. 4 and Bhagwat col. 9, l. 19-col. 10, l. 15).
9. The Examiner concluded that it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt Bhagwat's concept to the admitted prior art to allow more space for transmitting signaling information at one time (Final Rejection 4, Ans. 4).
10. Bhagwat describes a network system that includes a mobile host **401** connected to a wireless attachment (WAT) **411** and a wireless access

- point (WAPt) **412** connected with an application host **402** (col. 4, l. 59-col. 5, l. 18 and **fig. 4**).
11. Bhagwat also describes that WAT **411** communicates with WAPt **412** using a shared medium access (SMAC) protocol **414** (col. 5, ll. 19-21 and **fig. 4**).
 12. Bhagwat describes that once a sufficient amount of information from the mobile host is accumulated in the WAT buffer **513**, a payload packet **529** is formed and sent to the WAT SMAC protocol module **514** where it adds a SMAC header to the payload packet to form a SMAC frame **530** (col. 6, ll. 1-8 and **fig. 5**).
 13. Bhagwat describes that the WAPt has a corresponding SMAC protocol module **515** and that the two protocol modules **514** and **515** coordinate the transmission of frames **530** between the mobile host and the WAPt using the rules of the SMAC protocol (col. 6, ll. 9-12 and **fig. 5**).
 14. Bhagwat also describes that a polling-based SMAC protocol can be used where the WAPt polls each mobile host in turn allowing it to transmit (col. 6, ll. 13-24).
 15. Bhagwat describes that in a polling-based SMAC, the SMAC portions of the protocol executed by the WAPt and WAT are asymmetric and have distinct non-identical roles where the WAT transmits only when instructed by the WAPt (col. 6, ll. 24-42).
 16. Bhagwat describes that the advantage of the asymmetric execution of the WAPt and WAT SMAC protocol portions is that it allows most of the medium access intelligence to be placed in the WAPt and little placed in the WAT which permits use of simple, low-cost and power efficient WATs (col. 6, ll. 34-42).

17. Bhagwat describes a polling based SMAC protocol frame which includes a payload field **604** that includes information needed by the recipient, for example a command sent by the WAPt to a WAT to go to sleep to conserve power (col. 7, ll. 39-65 and **fig. 6**).
18. Bhagwat describes that in a normal situation, such as when the WAT is already registered, a POLL frame is sent from the WAPt to a unique WAT to check whether it has a PAYLOAD frame ready to transmit and then a PAYLOAD frame is sent from a WAT to a WAPt following the POLL frame (col. 8, ll. 39-67).
19. Bhagwat also describes a registration process in which a WAPt sends an invitation POLL frame to an unregistered WAT, with the unregistered WAT replying with an invitation PAYLOAD frame that includes additional information fields including a payload field (col. 9, l. 56-col. 10, l. 7).
20. Bhagwat describes that additional information regarding the WAT can be provided by the WAT in the payload field such as whether the WAT supports power conserving sleep modes, authentication and encryption type or version (Bhagwat col. 10, ll. 11-15).
21. Bhagwat describes that the transmissions between the WAT and WAPt are generally under the control of the WAPt (col. 11, ll. 16-17).

D. Principles of Law

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007).

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined.” *Id.*

E. Analysis

Claims 1-12 stand or fall together (FF³ 4). Claim 1 is representative and recites the limitation “wherein the mobile terminal device further comprises means for packing the capability information into the payload part of the message before the message is transferred to the protocol stack and *wherein said message is transmitted without separate request*”. For all of the elements prior to the first “wherein” clause, the Examiner relied on the “admitted prior art” described in the background section of Applicants’ specification (FF 6)⁴. The Examiner relied on Bhagwat for the remaining claim elements.

Applicant argues that the Bhagwat excerpts cited by the Examiner do not describe packing of capability information into a payload part of a message, since Bhagwat describes that the payload part of the message contains information relating to the common transmission medium designated as WAT and WAPt. Applicant has failed to demonstrate error in the Examiner’s specific finding that Bhagwat describes capability information, such as whether power conserving sleep modes, authentication and encryption type are supported, and providing that information in the payload

³ FF denotes Finding of Fact.

⁴ Claim 1 appears to be an improvement claim (e.g., a “Jepson” claim). As such, the Examiner could have required Applicant to comply with 37 C.F.R. 1.75 (e).

portion of the message (FFs 8 and 11). Applicant argues in the Reply Brief however, that Bhagwat does not teach the transmission of a message without a separate request (Reply Br. 2). In the Reply Brief, Applicant argues that Bhagwat does not teach the transmission of a message without a separate request (Reply Br. 2). Applicant argues that the Examiner ignores the portion of the Bhagwat description cited at col. 9, l. 19-col. 10, l. 15 that refers to the required polling procedure (Reply Br. 2). Applicant further argues that throughout the description cited by the Examiner, Bhagwat describes that to initiate registration, the WAT receives an invitation poll frame and replies to it by sending an invitation payload frame (Reply Br. 2). Applicant argues that the polling procedure is a request followed by a response, and therefore the system of Bhagwat includes a request-response mechanism that requires a separate request (Reply Br. 2).

The Examiner found that col. 9, l. 19-col. 10, l. 15 of Bhagwat describes that a separate request is not required before the WAT (Wireless Attachment) sends a message to the WAPt (Wireless Access Point) (FF 8). Nothing in that section of Bhagwat describes the WAT transmitting to the WAPt a message without a request (i.e. an unsolicited transmission). As we see it, the Examiner incorrectly inferred that there is no separate request made for the *capability information* based on Bhagwat's description at column 10, lines 13-15 that "the WAT may notify whether it supports power conserving sleep modes, authentication and encryption type or version, payload or header compression, etc." Claim 1 recites "wherein said *message* is transmitted without separate request", not wherein the capability information is transmitted without separate request. The claimed capability information is part of the message that is transmitted. Bhagwat describes that the WAT only sends a message (i.e. PAYLOAD frame or invitation

PAYLOAD frame) to the WAPt when the WAPt sends a request (i.e. POLL frame or invitation POLL frame) to the WAT (FFs 14-15 and 17-21).

Bhagwat further describes that the WAT replies to the WAPt with an invitation PAYLOAD frame including a payload field which may include whether the WAT supports power conserving sleep modes, authentication and encryption (FFs 19-20). Thus, the capability information, if it is included, is necessarily part of the payload field or message that is transmitted from the WAT only after a request for such message is made by the WAPt.

The Examiner has failed to address Applicant's arguments raised in the Reply Brief⁵ and thereby has failed to direct us to a description, suggestion, or implication in Bhagwat that the WAT transmits a message to the WAPt absent a request. Bhagwat appears to describe the exact opposite since Bhagwat describes the asymmetric execution of respective WAPt and WAT shared medium access (SMAC) protocol portions of a polling-based SMAC, where the WAT transmits only when instructed by the WAPt. This transmission is said to be advantageous since it allows most of the medium access intelligence to be placed in the WAPt and little to be placed in the WAT which permits use of simple, low-cost and power efficient WATs (FFs 15-16).

For all of these reasons, Applicant has sufficiently demonstrated that the Examiner erred in determining that claims 1-12 are rejected under 35 U.S.C. § 103(a) as unpatentable over the admitted prior art in view of Bhagwat.

⁵ The Reply Brief was merely noted by the Examiner on 30 May 2006.

F. Decision

Upon consideration of the record, and for the reasons given, the Examiner's rejections of claims 1-12 as unpatentable under 35 U.S.C. § 103(a) over the admitted prior art in view of Bhagwat is reversed.

REVERSED

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Application 09/774,308

MAT: lb

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